

# NUTRIENTS: WATER SOLUBLE VITAMINS

Water soluble vitamins are required by all humans in small amounts. Our body cannot make any of these vitamins so it is very important to get them from the food we eat. Water soluble vitamins are available in many different foods. We do not store water soluble vitamins in our body, so it is important that we eat foods every day that are rich in these important nutrients. If you are eating a variety of fruits, vegetables, and whole grains every day you are probably getting all the water soluble vitamins you need!

Vitamin Name	Vitamin Function	Top 5 Food Sources
Vitamin B1 (Thiamin)	Helps turn food into energy. Antioxidant* properties. May reduce the risk of developing dementia and heart problems.	Pork, legumes (beans, lentils), whole grains, fortified* breakfast cereal, fortified* bread
Vitamin B2 (Riboflavin)	Helps turn food into energy. Antioxidant* properties. Helps break down and remove medications and toxins from the body.	Milk, fortified* breakfast cereal and bread, eggs, almonds, spinach
Vitamin B3 (Niacin)	Helps turn food into energy. May reduce the risk of developing certain types of cancer.	Fortified* cereal, turkey, chicken, tuna, peanuts
Vitamin B6	Helps build proteins in the body including neurotransmitters* and hormones. Helps transport oxygen through the body. May reduce the risk of heart disease, certain cancer, and dementia.	Oatmeal, pinto beans, pistachio, russet potatoes with the skin, turkey
Vitamin B12	Important for the breakdown of fat and protein. May reduce the risk of heart disease, Alzheimer's disease, and neural tube defects* in infants.	Only available in animal products! Crab, salmon, beef, milk, eggs, fortified* foods

<b>Vitamin Name</b>	<b>Vitamin Function</b>	<b>Top 5 Food Sources</b>
Folate	Helps build important components of the body including proteins, DNA*, neurotransmitters*, and red blood cells. May reduce the risk of heart disease, neural tube defects* in infants, and certain types of anemia.	Fortified* orange juice, lentils, green leafy vegetables, fortified breakfast cereal, beans
Pantothenic Acid	Involved in the transport of broken down fats. Turns food into energy.	Found in many foods! Avocados, yogurt, chicken, lentils, milk
Biotin	Helps make collagen, which is important for blood vessels, tendons, ligaments, and bones. Part of neurotransmitters* which can affect mood and learning. Antioxidant properties. Helps support a strong immune system.	Oranges, grapefruits, red bell peppers, kiwi, broccoli

<b>*Word Bank</b>	<b>Definition</b>
Antioxidant	A substance in the body that prevents damage to cells.
DNA (deoxyribonucleic acid)	Your genetic make-up (genes).
Fortified	The addition of extra vitamins, minerals, or fiber to a food product to increase its nutritional value.
Neural Tube Defects	A birth defect that affects the central nervous system.
Neurotransmitters	A chemical in the brain that sends a message from one part of the body to another part to make an action happen. The main communicators in the brain.

**References:**

Micronutrient Information Center. Linus Palling Institute Web Site.

<http://lpi.oregonstate.edu/infocenter/vitamins.html> Accessed: October-November 2012.

Insel P, Turner RE, Ross D. *Discovering Nutrition*. 3<sup>rd</sup> ed. Sudbury, MA. Jones and Bartlett;324-480.

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